

2003 Grant Program Projects

USING RAP AND CAPP FUNDS, GRANT COUNTY WEIGHS IN ON AREA-WIDE TRANSPORTATION UPGRADES

Road improvements funded by the Rural Arterial Program (RAP) are typically a great benefit to local area businesses. This was especially true of Grant County's



enhancements to 11 SW Road in 2002. 11 SW Road serves the growers and ranchers of the Royal Slope Agricultural Region in Grant County. As one of the county's fastest growing areas, the region's diverse range of products, including beef cattle, apples and vineyards, enhances the wealth, employment and general well being of the farming community. The 11 SW Road RAP project was a significant part of the county's efforts to assure this economy

stays strong. With the help of \$624,223 in RATA funding, the 5 mile long project replaced failing base materials with stronger gravels, widened the road to safety standards, and applied a Bituminous Surface Treatment (BST) to preserve its new condition and reduce maintenance.



In addition to 11 SW Road, the county has constructed and resurfaced an additional 23 miles of important collector roads in the area using Federal and CRAB administered County Arterial Preservation Program (CAPP) funds. Combined with WSDOT improvements to State Route 26 and Grant County's new district maintenance facility, this section of the Royal Slope Agricultural Region has received a near-total upgrade to its transportation services.

RAP and CAPP funds are clearly crucial parts of the transportation resources counties need in order to maintain their existing and developing economies.

WHATCOM COUNTY COMPLETES PARK ROAD RECONSTRUCTION

Park Road is a minor collector serving southwestern Whatcom County. The roadway links the south end of Lake Whatcom to State Route 9. Traffic utilizing this roadway, notably school bus traffic and public services, has no practical alternative route. Forseeing the road's demise through pavement failure, weak and narrow shoulders, and unsafe roadway features, the county proposed the project for RAP funding in two sections. Both sections ranked high on the array and funding was granted for both in April of 1999.

The project scope was defined as reconstruction from SR9 to South Bay Drive, a length of 2.78 miles. The improvements included removing failed pavement sections, shoulder rehabilitation, paving travel lanes and shoulders with asphalt concrete pavement, guardrail installation, and safety improvements over the entire length.

Colacurcio Brothers of Blaine, WA accomplished the work, with construction starting in May of 2001 and ending in August 2002. The total project cost was \$4,780,103, with \$1,000,000 of that amount provided by the RAP.



The Park Road project demonstrates Whatcom County's keen focus on meeting local road needs using the right funds for the right improvements.

COLUMBIA COUNTY FUNDS BROUGHTON BRIDGE REPLACEMENT WITH RATA FUNDS

The Broughton Bridge, located on Columbia County's Patit Road, near the City of Dayton and the road's intersection with State Route 12, was for years a concern to local farmers and community members promoting the county's recreational opportunities. Built in 1920, and only 19.5 foot wide, the Luten Arch structure was made of earthen-filled concrete and remained structurally stout and aesthetically pleasing. Nevertheless, the bridge was just too narrow to safely accommodate modern farm machinery and the nearly 1000 vehicles per day using the road during peak fishing and hunting seasons. The road approaches featured tight radiuses that were not suited for the road's 40 mph speed. With the help of \$230,600 in RAP funds, \$283,000 in Federal funds, and \$77,400 in local funds the County replaced the Luten Arch with a modern day pre-stressed 32-foot wide, 80-foot long concrete bridge. The adverse road alignment on both ends of the bridge was corrected as well.



The County was surprised to learn that the creek below the bridge, filled with Reed Canary Grass and which in many years goes dry, was home for threatened steelhead. The County hired fish biologists to assess how the new bridge would affect the steelhead. The resulting "likely to adversely affect" call required a biological opinion from National Marine Fisheries Service and extensive, costly negotiations. Fortunately the mitigation measures were much cheaper than the environmental paperwork and mainly consisted of planting some trees along the stream banks.

KSC Inc. of Kennewick was awarded the project at their bid of \$468,260. The project took about two months and was completed within \$400 of the bid price.

The County is proud of the new bridge and appreciates the public compliments. The increased bridge width and better road alignment make it safer and easier for the campers, hunters, fishermen, farmers and residents who use this road.



LEWIS COUNTY PROGRAMS CAPP FUNDS FOR A NUMBER OF NEEDY ROADS IN 2002

Many road departments might well ask themselves "Why is it we hurt most the roads we love?" Rather than wasting time contemplating this profound question, Lewis County applied well -thought-out CAPP funded improvements to three of their more popular roads that were experiencing heightened pavement failure. Avery, North Military, and Coal Creek Roads were selected since they provide access to mills, gravel pits, detours off of I-5, and commuter traffic to the Chehalis business district. The county combined important sections of these roads into a construction project and contracted with Wilder Construction Company of Olympia, WA to do the needed preleveling and thin overlay work. With \$306,710 in CAPP funds and \$517,400 in county funds the roads will continue to support the high traffic demands they have for years.



Lewis County, through detailed pavement monitoring and timely application of CAPP and their own preservation funds, was able to prevent further and more costly deterioration of these crucial roads.

**LINCOLN COUNTY USES CONTRACTOR AND ITS OWN CREWS TO
IMPROVE HARRINGTON TOKIO ROAD**

Harrington Tokio Road is one of the busiest roads within Lincoln County. It is part of a major north - south freight and mobility corridor extending from northeastern Washington and Canada to US I-90. It is also a heavily used local farm to market route.

Construction efforts focused on improving the roadway's steep rolling alignment, narrow lanes and shoulders, and rehabilitating its failing surface and subgrade.

With \$585,000 in RATA funding and \$603,093 in Federal funding, the county was able to accomplish the needed improvements using both a private Contractor and Lincoln County crews. Halme Construction Incorporated, of Davenport, WA, completed the roadway excavation embankment construction, culvert installation, crushed surfacing and asphalt concrete paving, while Lincoln County did the construction seal-coat, striping and signing.



The county's effective project management and use of its own skilled workforce for portions of the construction resulted in a finished product all are satisfied with.

SNOHOMISH COUNTY UPGRADES

AIRPORT WAY/LOWELL-SNOHOMISH RIVER ROAD INTERSECTION

Lowell-Snohomish River Road and Airport Way are high-volume minor collector arterials that intersect each other near Harvey Field and State Route 9 in Snohomish, Washington. Due to vigorous population growth, the Lowell-Snohomish Road became an important alternate route to State Route 9, linking the cities of Everett and Snohomish. Prior to area-wide flood damage in 1995, which closed the Lowell-Snohomish River Road to through traffic, this intersection operated at a LOS "F" due to heavy traffic volumes, poor sight conditions, lack of signalization, and substandard alignment.



The completed project improved approximately 2,700 feet of the Lowell-Snohomish River Road from State Route 9 to Airport Way. Along with repairing flood damaged sections, improvements on the road included construction of an 8-foot shoulder, installation of guardrail at spot locations and the creation of a storm water bio-filtration system.

Relocation of the Airport Way / Lowell-Snohomish River Road intersection approximately 200 feet south gained the following benefits:

- 1. A business/industrial driveway became an intersection leg instead of a traffic conflict, allowing safe control of the traffic movements in and out of the businesses.*
- 2. Allowed construction of a left turn lane because it is sufficiently away from the Snohomish River Bridge.*
- 3. The county was able to design the intersection with a 90 degree angle, as opposed to the 30 degree angle before construction.*
- 4. Signals and illumination were installed.*

The project was awarded to Grade Incorporated in August, 2001 and was completed the following April, 2002. The improvements provided an efficient realignment, coupled with signalization, to improve traffic flow and sight distance at the intersection.

The total cost came to \$2,431,530, made up of \$774,000 in RATA funds and \$1,657,530 in county funds.

The Airport Way / Lowell-Snohomish River Road intersection is no longer a tense bottleneck, but a complete and effective means of managing traffic flow.



Stevens County Improves five miles of the Valley-Westside/Oakshot Road

The Valley-Westside / Oakshot Road project included two major rural collector roads that connect Orin Rice Road from the west to the city of Colville, the commercial hub of Stevens County. As traffic volumes increased over the years, road deficiencies such as narrow lane and shoulder widths, surface deterioration, poor intersections, and limited sight distance prompted the county to apply a major rehabilitation effort to the road's improvement. The county took special note of the hazardous 90-degree turn that through traffic had to negotiate where the two roads meet.



After many years in the planning, design, and right-of-way acquisition phases (RATA funding was approved in 1995), the project finally went to construction in 2002 at a cost of \$2,000,000 with the help of \$1,136,000 in Federal STP and local funds, and \$864,000 in RATA funds. The Prime Contractor, Valley Asphalt of Colville, WA, rehabilitated the roadway surface by grinding the existing asphalt surface, mixing in cement treated base and then working the mixed materials into the subgrade. The roadway was widened to 28 feet, the sharp curve radiuses were increased and

the roadway was resurfaced with 0.25 ft of asphalt concrete pavement. The contractor also removed roadside hazards, added sufficient drainage structures, and installed over 7,000 lineal feet of guardrail to enhance the safety of the roadway.

WALLA WALLA COUNTY REBUILDS DODD ROAD TO MEET REGIONAL AGRICULTURAL NEEDS

Dodd Road is the only east/west farm to market road in western Walla Walla County. Originally constructed as a gravel road, it provides this large farming area with access to SR 12. Continued development along the road created the need for asphalt paving, especially at the western end near SR 12 where region-induced high truck volumes are concentrated. This improvement generated even more development, including a major feedlot, a large meat packing plant, a cold storage facility, and a potato storage facility. Growth in basic farming operations has continued.

The impacts of heavy truck volumes to the road were fast and furious, causing cracking, rutting and raveling to appear more quickly than usual. This made Portland Cement Concrete Pavement a preferred and economically viable alternative to Asphalt Concrete Pavement for the RAP funded project. Traffic control was also major issue during construction. In addition to the truck traffic, the meat packing plant employs three shifts of several hundred workers. With no alternate routes, traffic had to be channeled through the work area 24 hours per day. When it was all done, however, Dodd Road had emerged from a width of 26 ft to a higher capacity of 40 feet, including 8 foot shoulders, with the added benefit of a much stronger, low maintenance pavement.

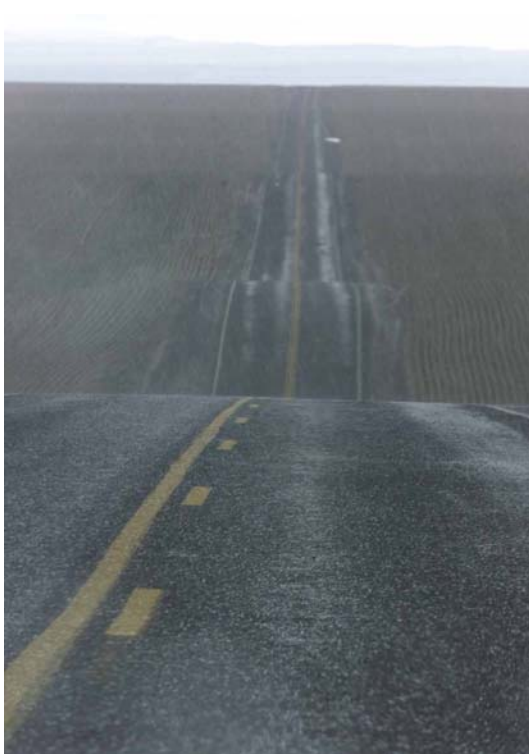
Acme Concrete Paving of Spokane, WA performed the work at a cost of \$2,139,959, with the RAP contributing \$585,000 to the effort.



The project was a challenging but crucial improvement that will serve the citizens of Walla Walla County and their economic vitality for a long time.

BENTON COUNTY TAMES SELLARDS ROAD WITH RAP FUNDS

Sellards Road is an east-west arterial across the middle of Benton County, traversing the Horse Heaven Hills. The horizontal alignment was not a problem since the roadway follows the section lines and is fairly straight. The real problem was that the original vertical alignment followed the lay of the land and featured a dip in the road that was so extreme, it caused a fully loaded grain truck trailer to break in half. This same sag and crest curve combination was well known to passenger cars as well, having launched a few of them through air and into adjacent wheat fields.



In 1997 the county was awarded \$1,125,000 in RATA funds to remedy the alignment, width and structural deficiencies of this important haul and commuter route. The total project was 4.05 miles long and involved 75,900 cubic yards of excavation; 63,070 cubic yards of embankment construction; a foot of crushed surfacing; 4 inches of Asphalt Concrete Pavement; and guardrails placed adjacent to large fills.



Copenhaver Construction of Creston, WA was the contractor. The total project costs were:

<i>Preliminary Engineering</i>	<i>\$124,121</i>
<i>Right of Way</i>	<i>\$6,333</i>
<i>Construction Engineering</i>	<i>\$122,216</i>
<i>Contract Construction</i>	<i>\$1,164,236</i>

The completed project meets the needs for safe and sane travel on an important cross county arterial.